

1 1. A program for interfacing a client computer to one or more
2 scan peripheral devices, the program comprising functions for:

3 querying a scan peripheral for a capability descriptor;
4 determining whether an appropriate capability descriptor is obtained
5 in response to said step of querying;

6 storing a capability descriptor associated with a scan peripheral for
7 which an appropriate information capability descriptor has been received as
8 determined in said step of determining;

9 configuring a scan driver for a scan job for a scan peripheral when a
10 scan job is requested by a client by linking a set of pre-stored driving modules, a
11 set of pre-stored driving modules being selected according to user set parameters
12 in the scan job and capabilities indicated in a stored information capability
13 descriptor concerning a scan peripheral to which the scan job is directed.

1 2. The program according to claim 1, further comprising a step of
2 de-linking pre-stored driving modules upon completion of a scan job.

1 3. The program according to claim 1, wherein said step of
2 configuring includes extracting information from a stored capability descriptor to
3 alter a user interface dependent upon a peripheral's capabilities.

1 4. The program according to claim 1, wherein a capability
2 descriptor stored in said step of storing comprises a string including fields
3 indicating dots per inch capabilities, paper size capabilities, color/grayscale
4 options, image formats supported, and whether or not a preview scan is supported.

1 5. The program according to claim 1, stored in a server which
2 provides an interface to a network and at least one scan peripheral.

1 6. The program according to claim 1, stored in a computer
2 connected to at least one scan peripheral.

1 7. The program according to claim 1, further comprising a functions
2 for:

3 obtaining a model of scan peripheral for a peripheral when said
4 function for determining determines that an appropriate capability descriptor was
5 not received in response to a query conducted by said function for querying; and

6 associating a pre-stored capability descriptor with a scan peripheral
7 whose model was determined by said step of obtaining.

1 8. A scan peripheral server having a network connection interface
2 and one or more ports for connection to at least one scan peripheral, the server
3 including:

4 memory for storing capability descriptors defining capabilities of
5 scan peripherals;

6 memory for storing a set of driver modules; and

7 a program for controlling execution of scan jobs requested from the
8 network connection of a scan peripheral connected to one of said one or more
9 ports, the program comprising functions for

10 obtaining a capability descriptor from one or more scan
11 peripherals connected to any of said one or more ports;

12 storing a received capability descriptor in said memory for
13 storing capability descriptors;

14 accepting a scan job request from said network connection for
15 one or more scan peripherals attached to said one or more ports;

16 extracting capability information from a stored capability
17 descriptor in response to a scan job;

18 sending information to said network connection to modify a
19 user interface;

20 accepting parameters for a scan job from said network
21 connection;

22 linking driver modules from said set of driver modules
23 according to capability information extracted by said function for extracting and
24 parameters accepted by said function for accepting; and

25 controlling a scan job according to the driver modules linked
26 in said function for linking.

1 9. The server according to claim 8, wherein a capability
2 descriptor comprises a data string of capability data.

1 10. The server according to claim 8, wherein said program for
2 controlling execution of scan jobs further comprises:

3 obtaining model information from any one or more scan peripherals
4 connected to any of said one or more ports when said any one or more scan
5 peripherals does not provide a capability descriptor; and

6 associating a capability descriptor pre-stored in said memory for
7 storing capability descriptors with said any one or more scan peripherals which
8 does not provide a capability descriptor according to model information obtained
9 in said step of obtaining.

1 11. The server according to claim 8, wherein a data string is
2 formatted as a data string including a scan language, an image format, a resolution
3 and a preview scan capability.

1 12. A peripheral including a scanning capability, the peripheral
2 comprising:

3 a scan system for scanning documents and producing electronic data
4 therefrom;

5 an interface for connecting to a client machine or server;

6 memory for storing data;

7 a scan capability descriptor stored in said memory; and

8 a controller for communicating with said client machine or server
9 through said interface to perform a scan job, said controller sending said capability
10 descriptor to said client machine or server through said interface in response to a
11 query requesting a capability descriptor.

1 13. A method for controlling a scan job directed to a peripheral
2 including a scanning function, the method comprising steps of:

3 obtaining a capability descriptor from the peripheral including the
4 scanning function; then, to implement a scan job,
5 configuring a scan driver from a set of scan drive modules based
6 upon capabilities indicated by said capability descriptor and parameters included
7 in the scan job.